

# Uniden UM50 INSTALL GUIDE

## **GETTING TO KNOW THE UNIDEN® UM50:**

The Uniden® UM50 will increase your cellular signal, expand your service coverage area, enhance voice call quality and significantly increase data speeds.

The Uniden® UM50 is equipped with internal automatic oscillation protection software. The booster constantly monitors the environment in which it is operating and automatically adjusts the gain/power accordingly to protect itself while giving you a maximum coverage footprint. It is easy and simple to install, and you can be up and running in minutes.



## **Standard Kit Includes:**



Booster



Donor (outdoor) Stick Magnet Mount Antenna



Server (interior) Blade Antenna



12V CLA Power Supply

# **INITIAL SETUP:**

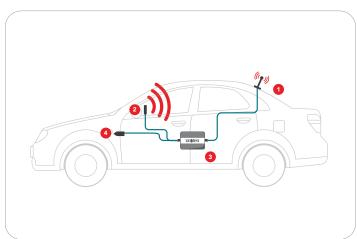
During this process you will connect the donor (outdoor) antenna, server (interior) antenna and the 12V power supply to the Uniden® UM50 booster unit as follows:

# 1. MOUNTING THE DONOR (OUTDOOR) ANTENNA

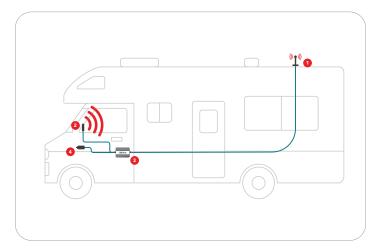
Connect the magnetic base unit to the donor antenna and place it on the metal roof of the vehicle. Keep it as far away from the server antenna as possible. Once you have found the desired positioning for your donor antenna, connect the coaxial cable directly to the booster on the connection marked "Outdoor"

- 1 Donor Antenna
- 2 Server Antenna
- 3 Booster
- 4 DC Power Connection

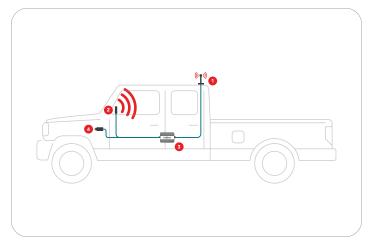
# Car



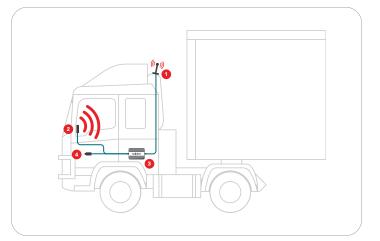
## RV



# **Pickup Truck**



#### Semi-Truck



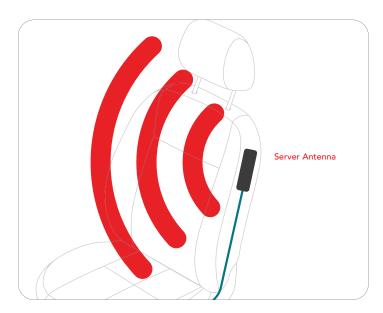
## **ANTENNA SEPARATION IS VERY IMPORTANT!**

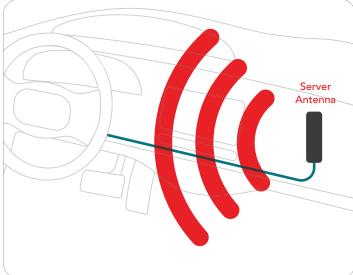
It's very important that the donor antenna and the server antenna have enough separation to ensure they do not cause feedback. The booster has special software that will detect any feedback in order to protect the cellular network. The way the booster protects the network is by reducing its output power in order to stop the feedback. When the booster reduces power, the coverage area will also be reduced. In order to get the maximum coverage from the booster, there must be adequate space in between the antennas.

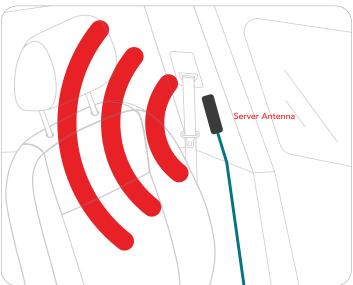
# 2. MOUNTING THE SERVER (INTERIOR) ANTENNA

Identify a place to mount the server antenna, either on the side of the seat or on the dash. The location should be at least 18 inches but no more than 36 inches from where the cellular device will be used. Use the adhesive strip provided and attach to desired location.

Identify an appropriate location for the server antenna and keep it as far away as possible from the location of the donor antenna. Once you have found the desired positioning for your server antenna, connect the coaxial cable directly to the booster on the connection marked "Indoor"

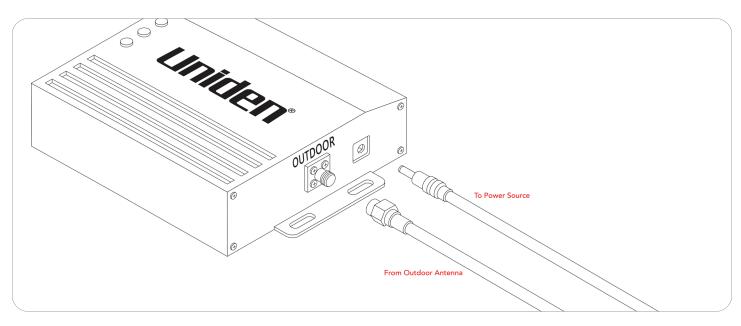


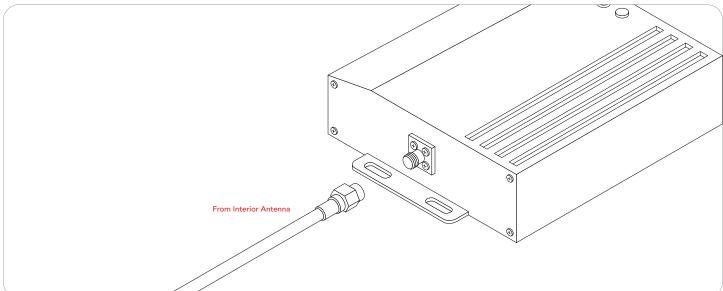




# 3. BOOSTER PLACEMENT

Place the booster in an easily accessible location within the vehicle i.e. Under the seat, in the rear of the vehicle or any other location that keeps the booster hidden out of sight but will allow you to monitor the LED lights for troubleshooting. Please DO NOT keep the booster in a location that is continuously exposed to sunlight as it can overheat.





# WHY DIFFERENT POWER SUPPLIES

There are two options for connecting power to the booster. The CLA (cigarette lighter adapter) is great for temporary installs, but for permanent installation, the 10ft direct connect power supply connects directly to a 12V power source and includes a fuse.

## **Power Supplies**



12V CLA Power Supply



12V 10ft Direct Connect Power Supply

# 4. COMMISSIONING & TESTING THE SYSTEM

Plugging in the power will switch the Uniden® UM50 ON causing the "Power" LED light on the backside of the unit to remain lit indicating the unit is properly powered.

## **UNDERSTANDING LED ALARM LIGHTS**

#### **SOLID GREEN**

The green light means the booster is operating correctly and your installation is successful.

## **BLINKING RED, THEN SOLID GREEN**

This is a built-in safety feature to prevent the booster from causing damaging interference with a nearby cell tower. This pattern will occur when you are driving and get close to a cell tower or when you are installing the kit and the server antenna is too close to the donor antenna. If during your installation, you have achieved the wanted signal boost, do not make any changes. If you are still not satisfied with the boost in coverage, refer to the Troubleshooting section below.

## **SOLID RED**

A solid red light means your booster is experiencing major feedback. The red light indicates it is reducing the output power in order to avoid interfering with the cellular operator's network. Refer to the Troubleshooting section below.

#### **LIGHT OFF**

If the LED light next to the "Power" label is off, please verify the booster is sufficiently connected to a power source. If the LED light for the Output power is off, this means your booster has stopped boosting on that frequency because it has experienced too much feedback.

#### **TROUBLESHOOTING**

How to solve LED light alarm problems and get maximum coverage

Please refer to this section only if your booster LED lights are red, blinking red or have shut off and you are not experiencing the desired cellular signal coverage.

- 1. Disconnect the booster from the power supply.
- 2. Create separation between the inside and outside antenna. Make sure the antennas are not causing a feedback loop (As discussed earlier). In order for the booster to emit maximum boost, the antennas need to have adequate separation.
- 3. Reconnect the booster to the power supply.

Monitor the LED lights on the booster. If the lights are flashing, solid red or shut off, repeat step 1,2 and 3 until you reach the maximum coverage